

REMARKS

Claims 9 and 11 have been amended solely to include the recited methods of claims 7 and 10, respectively. Claim 12 has been added. Support for the amendments and new claims can be found throughout the specification (e.g., Example 6 on pages 50-54) and original claims (e.g., claims 7, 8, and 10). No new matter has been introduced and no new issues have been raised. These amendments have been made solely to expedite allowance of claims directed to the most commercially relevant embodiments of the present invention. Applicants reserve the right to pursue claims of similar or differing scope in the future.

Applicants respectfully request reconsideration in view of the following remarks. Issues raised by the Examiner will be addressed below in the order they appear in the prior Office Action.

Election/Restriction

The Office Action has acknowledged Applicants' election of Group II (claims 9 and 11) in the Response filed on July 27, 2006. However, the Office Action does not address Applicants' request for withdrawal of the sequence election requirement. Applicants reiterate the arguments already made of record that non-elected primer sequences SEQ ID NOs: 297-309 share a high degree of sequence similarity to the elected primer SEQ ID NO: 296 and all primers function equally well. Applicants respectfully request reconsideration and withdrawal of the sequence election requirement and request a search and examination of at least ten sequences as claimed herein.

Claim Rejections under 35 U.S.C. § 102(b)

Claims 9 and 11 are rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Moreno de Alboran et al. (Immunotechnology, 1(1): 21-28, 1995). Applicants respectfully traverse the rejections.

The standard for anticipating a claim is clearly outlined in MPEP 2131, and this standard is further supported by the Courts. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1978).

Applicants contend that Moreno de Alboran et al. fail to satisfy the criteria for anticipating the present invention.

Moreno de Alboran et al. describe a method of making an IgA library which involves a PCR amplification step using two primers (see, e.g., page 22, right column, lines 25-36; page 24, right column, lines 3-13). It was known in the art that the two-primer PCR method has drawbacks. For example, the specification teaches that "[a]nother example of a drawback of the current amplification methods is the requirement of two binding events which may have optimal binding at different temperatures as well as the use of primers containing naturally occurring sequences. This combination of factors results in increased likelihood of mis-priming and resultant amplification of sequences other than the target sequence." See, e.g., page 3, lines 16-20. One of skill in the art would know that the two-primer PCR method used by Moreno de Alboran et al. would result in a bias in the library since different antibodies have slightly different sequences, depending upon which sequences are favored for amplification in the early rounds.

By contrast, independent claim 9 relates to a library of IgA antibodies prepared by a method which comprises a step of amplifying the extended polynucleotides using a single primer having the predetermined sequence (i.e., step (g)). The recited method would result in an improved library as compared to the method of Moreno de Alboran et al. In preparing the claimed library, a predetermined sequence is artificially added to the 5' end of all the polynucleotides to be amplified and a sequence that is complementary to the predetermined sequence is added to the 3' end of all the polynucleotides to be amplified. All the modified polynucleotides are subsequently amplified using a **single primer** (see, e.g., Figure 6; and the paragraph bridging pages 16 and 17). As a result, all of the different polynucleotides (e.g., IgA) are amplified without bias, thereby yielding an **improved** library which is clearly distinguishable from the library of Moreno de Alboran et al.

In addition, independent claim 9 relates to a library of IgA antibodies prepared by a method which comprises a step of contacting the diverse population of templates with at least one primer, the at least one primer having a first portion which anneals to the templates and a second portion of predetermined sequence which does not anneal to the templates (i.e., step (b)). The recited method is used to make the entire human repertoire of IgA antibodies (heavy chain

and light chain). For example, Example 6 provides the primer sequences that are reported to cover the entire human repertoire of heavy chain genes (e.g., page 52-53); Example 3 provides the primer sequences that are reported to cover the entire human antibody repertoire of kappa light chain genes (e.g., page 27-28); and Example 4 provides the primer sequences that are reported to cover the entire human repertoire of lamda light chain (e.g., page 37-38). By contrast, Moreno de Alboran et al. do not teach or suggest use of the primers which cover the entire human repertoire of IgA antibodies. As a result, the IgA libraries in Moreno de Alboran et al. do not represent the entire human repertoire of IgA antibodies.

In view of the above arguments, Moreno de Alboran et al. do not teach all the elements of independent claim 9 and fail to anticipate claim 9. For the same reasons, Applicants submit that all claims depending from claim 9 are not anticipated by Moreno de Alboran et al. Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(b).

CONCLUSION

In view of the above remarks, Applicants believe that the pending application is in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000. Should an additional fee be required, please charge our **Deposit Account No. 18-1945**.

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Respectfully submitted,

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